Electronic Products

Queena Fan, Coordinator
(202) 205-3055
queena.fan@usitc.gov

Change in 2005 from 2004:[1]

U.S. trade deficit: Increased by $19.2 billion (15 percent) to $149.9 billion
U.S. exports: Increased by $6.0 billion (4 percent) to $155.4 billion
U.S. imports: Increased by $25.1 billion (9 percent) to $305.3 billion

The U.S. merchandise trade deficit in electronic products continued to expand in 2005, increasing by approximately $19.2 billion dollars (15 percent) (table ET-1). Factors such as increased U.S. demand for the latest technological items, business cycles, and new government policies all contributed to the increase. Asia, historically a major source of production for the electronics sector, accounted for 92 percent of the total increase in the trade deficit. One industry source indicated that the Asia-Pacific region has favorable conditions such as lower overheads, skilled labor, and complimentary government policies which have promoted investment in the information technology and high-tech sectors.[2]

U.S. exports

The major markets for U.S. exports of electronics in 2005 were Canada, Mexico, and Japan, which together accounted for almost 30 percent of total sectoral exports. Exports to Canada and China (the fourth-largest market) increased by over $1 billion to each country, accounting for approximately 40 percent of the total increase, while exports to most other countries either declined or increased only slightly. The top three leading electronics export growth sectors, in terms of absolute value, were medical goods ($2.5 billion); computers, peripherals and parts ($1.5 billion); and measuring, testing, and controlling instruments ($796 million) (table ET-2). Meanwhile, U.S. exports of semiconductors and integrated circuits, cathode-ray tubes, and electrical capacitors and resistors experienced the greatest declines in 2005, decreasing in absolute value by $935 million, $398 million, and $377 million, respectively.

The U.S. medical goods sector experienced the greatest growth in exports, increasing by over $2.5 billion (14 percent) in 2005 as national governments in the European Union, Japan, and other foreign markets faced increased pressures to upgrade their healthcare systems. U.S. manufacturers of advanced technology products such as cardiac rhythm management equipment, drug eluting stents, and orthopedic implants particularly benefitted from increased expenditures for healthcare in the Netherlands, Germany, the United Kingdom, Japan, Mexico, and China.

U.S. exports of computer hardware increased slightly after several years of decline. Like many industries in the electronics sector, a large part of the manufacturing of computer hardware takes place overseas, particularly in the Asia-Pacific region. In 2005, approximately $12 billion (40 percent) of total U.S. computer sector exports consisted of

---

[1] Telephone and telegraph apparatus; television receivers and video monitors; computers, peripherals, and parts; and medical goods are analyzed separately in this chapter.
[2] Mergent Online, "The Asia-Pacific IT & High Technology Sectors."

Table ET-1
Electronic products: **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005**[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
	Million dollars						
U.S. exports of domestic merchandise:							
China	4,892	4,855	5,934	6,902	7,951	1,049	15.2
Mexico	20,798	18,965	16,414	17,383	16,609	-774	-4.5
Japan	15,393	11,810	11,348	11,231	10,963	-268	-2.4
Malaysia	5,145	5,997	7,290	6,546	6,314	-231	-3.5
Canada	20,108	17,025	16,637	17,559	18,894	1,335	7.6
Korea	6,479	6,380	7,085	7,388	7,896	509	6.9
Taiwan	5,661	5,961	5,555	5,624	5,463	-161	-2.9
Germany	8,787	7,639	7,633	7,526	7,944	418	5.6
Singapore	5,193	4,600	4,992	6,004	6,039	35	0.6
United Kingdom	9,748	7,432	7,065	8,112	7,509	-603	-7.4
All other	58,406	49,764	50,887	55,175	59,825	4,650	8.4
Total	160,610	140,428	140,838	149,450	155,408	5,959	4.0
EU-15	41,819	34,805	34,703	36,641	37,681	1,040	2.8
EU-25	42,710	35,672	35,604	37,600	38,807	1,207	3.2
OPEC	2,462	1,981	1,888	2,957	3,752	795	26.9
Latin America	31,759	27,705	24,648	26,798	27,548	751	2.8
CBERA	2,505	2,883	3,098	3,101	3,433	332	10.7
Asia	56,809	51,835	55,638	57,832	59,412	1,580	2.7
Sub-Saharan Africa	700	637	778	878	1,008	130	14.8
Central and Eastern Europe	872	823	942	996	1,192	196	19.7
U.S. imports of merchandise for consumption:							
China	27,231	36,270	47,150	69,153	86,716	17,563	25.4
Mexico	37,221	35,029	34,560	38,945	40,160	1,215	3.1
Japan	35,676	30,745	29,177	32,020	31,510	-510	-1.6
Malaysia	17,751	19,501	20,695	22,273	27,554	5,281	23.7
Canada	13,868	10,605	9,768	10,960	12,457	1,497	13.7
Korea	15,409	15,411	15,955	19,699	15,381	-4,318	-21.9
Taiwan	17,391	16,594	15,654	16,418	16,221	-198	-1.2
Germany	7,242	7,295	7,983	9,039	9,963	924	10.2
Singapore	11,462	10,669	10,066	10,477	9,853	-624	-6.0
United Kingdom	5,805	4,597	4,795	5,317	5,411	94	1.8
All other	40,515	42,530	43,030	45,846	50,043	4,197	9.2
Total	229,571	229,245	238,833	280,146	305,268	25,122	9.0
EU-15	26,545	27,220	28,986	31,986	33,750	1,764	5.5
EU-25	28,128	28,655	30,656	34,063	36,087	2,024	5.9
OPEC	2,300	2,093	1,761	2,067	2,233	166	8.0
Latin America	40,186	38,299	38,105	41,742	43,528	1,786	4.3
CBERA	1,510	1,732	2,164	2,068	2,306	238	11.5
Asia	141,280	145,645	153,491	185,897	205,118	19,222	10.3
Sub-Saharan Africa	53	50	66	71	76	5	6.9
Central and Eastern Europe	1,327	1,207	1,425	1,783	2,136	353	19.8

See footnote(s) at end of table.

Table ET-1—*Continued*
Electronic products: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004	
						Absolute	*Percent*
	Million dollars						
U.S. merchandise trade balance:							
China	-22,340	-31,414	-41,216	-62,251	-78,764	-16,513	-26.5
Mexico	-16,423	-16,064	-18,146	-21,562	-23,550	-1,988	-9.2
Japan	-20,283	-18,935	-17,829	-20,789	-20,547	242	1.2
Malaysia	-12,606	-13,504	-13,406	-15,728	-21,240	-5,512	-35.0
Canada	6,241	6,420	6,869	6,600	6,437	-163	-2.5
Korea	-8,930	-9,031	-8,869	-12,311	-7,484	4,826	39.2
Taiwan	-11,729	-10,633	-10,099	-10,794	-10,758	36	0.3
Germany	1,544	345	-350	-1,513	-2,019	-506	-33.5
Singapore	-6,269	-6,069	-5,075	-4,473	-3,814	660	14.7
United Kingdom	3,942	2,835	2,270	2,795	2,098	-697	-24.9
All other	17,891	7,235	7,856	9,330	9,782	452	4.8
Total	-68,962	-88,817	-97,994	-130,696	-149,859	-19,163	-14.7
EU-15	15,274	7,585	5,718	4,655	3,931	-724	-15.6
EU-25	14,582	7,016	4,948	3,538	2,720	-817	-23.1
OPEC	161	-111	127	891	1,519	629	70.6
Latin America	-8,427	-10,594	-13,457	-14,945	-15,980	-1,035	-6.9
CBERA	995	1,151	934	1,033	1,127	94	9.1
Asia	-84,471	-93,811	-97,852	-128,065	-145,707	-17,642	-13.8
Sub-Saharan Africa	648	587	711	807	932	125	15.5
Central and Eastern Europe	-455	-383	-483	-788	-944	-157	-19.9

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table ET-2
Leading changes in U.S. exports and imports of electronic products, 2001–2005[1]

Industry/commodity group	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
	Million dollars						
U.S. EXPORTS:							
Increases:							
Medical goods (ET040)	14,987	15,059	16,827	18,433	20,970	2,537	13.8
Computers, peripherals, and parts (ET035)	38,125	29,534	28,038	27,350	28,862	1,512	5.5
Measuring, testing, and controlling instruments (ET043)	15,605	14,346	14,683	16,603	17,399	796	4.8
Decreases:							
Semiconductors and integrated circuits (ET033)	33,455	31,738	35,712	35,130	34,195	-935	-2.7
Cathode-ray tubes (ET031)	2,056	1,762	1,202	998	600	-398	-39.9
Electrical capacitors and resistors (ET025)	2,002	1,706	1,623	1,664	1,286	-377	-22.7
All other	54,380	46,283	42,754	49,271	52,095	2,824	5.7
TOTAL	160,610	140,428	140,838	149,450	155,408	5,959	4.0
U.S. IMPORTS:							
Increases:							
Telephone and telegraph apparatus (ET017)	27,174	27,948	30,982	39,341	49,220	9,879	25.1
Television receivers and video monitors (ET022)	8,615	10,586	12,654	17,509	22,712	5,202	29.7
Computers, peripherals, and parts (ET035)	74,547	75,817	76,940	89,264	93,950	4,685	5.2
Medical goods (ET040)	10,869	13,232	16,143	19,006	20,548	1,542	8.1
Consumer electronics (except televisions) (ET018)	19,525	21,455	21,471	24,428	25,866	1,438	5.9
Decreases:							
Semiconductors and integrated circuits (ET033)	30,016	25,651	24,190	26,256	25,425	-831	-3.2
Photographic cameras and equipment (ET039)	3,560	3,029	2,715	2,382	1,880	-503	-21.1
Radio and television broadcasting equipment (ET023)	6,066	4,977	4,120	4,309	3,830	-479	-11.1
All other	49,200	46,549	49,618	57,649	61,838	4,188	7.3
TOTAL	229,571	229,245	238,833	280,146	305,268	25,122	9.0

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

parts and accessories for personal computers, of which $4.5 billion was destined for Asian manufacturers and consumers.

U.S. imports

The major sources of increases in U.S. imports of electronics in 2005 were China, Malaysia, and Canada, which together accounted for nearly 42 percent of total sector imports (table ET-1). While Mexico and Japan remained the second- and third-largest import sources for electronics, Mexico only accounted for 5 percent of the total increase in sector imports and imports from Japan declined. Meanwhile, imports from Malaysia grew by almost $5.3 billion, or 21 percent of the total rise in sector imports, remaining as the fourth-largest import source of electronics for the United States.

The three leading electronics import growth sectors in terms of absolute value were telephone and telegraph apparatus ($9.9 billion); television receivers and video monitors ($5.2 billion); and computers, peripherals, and parts ($4.7 billion). The leading decreases in imports in terms of absolute value were in semiconductors and integrated circuits ($831 million), photographic cameras and equipment ($503 million), and radio and television broadcasting equipment ($479 million) (table ET-2). Telephone and telegraph apparatus accounted for the largest total increase in U.S. electronics imports; factors such as converged technologies and increasing wireless usage all contributed to growth in consumer demand for products such as cellular phones and personal digital assistants in 2005.[3] Imports of television receivers and video monitors increased by 30 percent to almost $23 billion, due to shifting U.S. consumer demand in favor of flat panel display color televisions. Demand for picture tubes has declined to the point that the last two U.S. producers of color picture tubes announced plans to end production in the United States in 2006.[4] The third-largest increase in imports was in computer equipment. For several years, this sector has experienced significant growth rates in imports, due primarily to the global supply chain and the location of production by many major original equipment manufacturers in Asia.

Factors such as business cycles, the timing of equipment upgrade cycles, and product changes contributed to declines in imports of semiconductors and integrated circuits, photographic cameras and equipment, and radio and television broadcasting equipment in 2005. The semiconductor market is cyclical and had experienced a boom year in the chip cycle (28 percent growth) in 2004.[5] In 2005, the immediate post-boom year in the cycle, both U.S. imports and exports of semiconductors declined. Meanwhile, the market share of photographic or analog cameras in the United States declined from 81 percent of cameras sold in 2000 to an estimated 19 percent in 2005.[6] Most analog cameras are now sold in markets outside of the United States, Europe, and Japan, as the trend towards digital cameras continues. Radio and television broadcasting equipment imports also decreased in 2005 due to migration by consumers to newer technologies. Imports under this sector decreased by $479 million to $3.8 billion (11 percent), due principally to a decrease in imports from Mexico of set top boxes without tuners and apparatus for receiving satellite television

---

[3] Pappalardo, "Study: Telecom is over the hump."

[4] Associated Press, "Flat Panels Dim TV Tube Era;" and Cal Trade Report, "Sony to Shutter San Diego Facility."

[5] McClean, Matas, and Yancey, *The McClean Report: A Complete Analysis and Forecast of the Integrated Circuit* 1-1.

[6] Photo Marketing Association International, "Photo Industry 2005: Review and Forecast."

signals, as the U.S. market is shifting towards set top boxes and satellite receivers containing integral digital tuners.[7]

[7] Set top boxes and satellite receivers containing digital tuners are under digest ET022.

Telephone and Telegraph Apparatus[1]

Change in 2005 from 2004:

U.S. trade deficit: Increased by $9.7 billion (38 percent) to $35.0 billion
U.S. exports: Increased by $224 million (2 percent) to $14.2 billion
U.S. imports: Increased by $9.9 billion (25 percent) to $49.2 billion

The U.S. trade deficit in telephone and telegraph apparatus increased significantly for the fourth consecutive year. U.S. exports remained relatively stable in 2005, while imports continued to rise largely in response to U.S. spending on network equipment and wireless devices, which increased by 16 percent and 23 percent,[2] respectively, as new wireless subscribers were added and others, spurred by new applications such as cameras, video games, and ring tones, replaced or upgraded their wireless devices.

U.S. exports

U.S. exports of telephone and telegraph apparatus increased by $224 million (2 percent) to $14.2 billion in 2005 (table ET-3). Leading U.S. sector exports consisted largely of parts, transmission and reception apparatus for telecommunications networks, and cellular telephones. The largest markets for U.S. sector exports were the Netherlands, Mexico, and Canada which collectively accounted for nearly one-third of the total in 2005. U.S. sector exports to the Netherlands increased by 38 percent, reflecting the continued expansion of the European market, which grew by 8 percent in 2005.[3] Exports to Mexico and Canada, on the other hand, decreased by 7 percent and 4 percent, respectively, as both countries increased their reliance on Asian sources of sector equipment.[4]

U.S. imports

U.S. imports of telephone and telegraph apparatus increased by approximately $10 billion (25 percent) in 2005, to $49.2 billion (table ET-3). The largest import sources were China, Malaysia, Korea, and Mexico. U.S. sector imports from Malaysia nearly doubled in 2005, reaching $7.5 billion, while imports from China increased by 51 percent to reach $14 billion. U.S. sector imports from Mexico and Korea decreased by 5 percent and 25 percent, respectively, as the United States sourced an increasing share of its cellular telephone imports from China at the expense of these countries. Printed circuit assemblies for use in sector apparatus, largely from Malaysia, accounted for a $2.5 billion increase, while cellular telephones imports increased by $3.1 billion, reflecting sharply increasing U.S. demand. During 2005, 25 million new wireless subscribers were added and an even larger number, enticed by new applications such as cameras, video games, and ring tones, replaced or upgraded their wireless devices.[5]

---

[1] This industry/commodity group includes both wireless and wired telecommunications equipment such as cellular telephones, facsimile machines, switches, and modems.
[2] Telecommunications Industry Association, *2006 Telecommunications Market Review*, 9.
[3] Ibid., 238.
[4] *World Trade Atlas*.
[5] Telecommunications Industry Association, *2006 Telecommunications Market Review*, 157.

Table ET-3
Telephone and telegraph apparatus (ET017): **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005**[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
	Million dollars						
U.S. exports of domestic merchandise:							
China	874	756	545	616	645	29	4.7
Malaysia	167	233	138	151	119	-32	-21.1
Mexico	2,189	1,328	1,229	1,573	1,459	-114	-7.2
Korea	462	404	373	460	397	-63	-13.8
Canada	2,048	1,571	1,416	1,506	1,440	-66	-4.4
Thailand	70	89	78	102	248	146	142.2
Japan	1,542	971	858	1,135	895	-241	-21.2
Netherlands	676	911	710	1,256	1,734	478	38.0
Taiwan	335	247	211	338	205	-133	-39.4
Sweden	81	69	86	43	75	32	73.6
All other	8,062	6,373	5,301	6,778	6,966	188	2.8
Total	16,506	12,952	10,946	13,958	14,183	224	1.6
EU-15	4,240	3,165	2,622	3,388	3,849	461	13.6
EU-25	4,366	3,302	2,736	3,519	4,018	500	14.2
OPEC	442	496	380	734	864	130	17.7
Latin America	4,438	3,038	2,770	3,652	3,477	-175	-4.8
CBERA	609	541	568	562	606	44	7.9
Asia	4,395	3,682	3,027	3,966	3,788	-179	-4.5
Sub-Saharan Africa	137	119	169	213	245	32	14.9
Central and Eastern Europe	190	165	128	162	206	43	26.8
U.S. imports of merchandise for consumption:							
China	3,222	4,659	5,932	9,556	14,410	4,854	50.8
Malaysia	1,958	2,326	3,495	3,778	7,512	3,734	98.8
Mexico	4,390	4,210	4,664	5,913	5,645	-267	-4.5
Korea	4,527	4,556	5,936	8,668	6,435	-2,233	-25.8
Canada	3,902	2,975	2,470	2,713	3,275	561	20.7
Thailand	310	340	711	1,450	2,657	1,207	83.2
Japan	2,488	1,815	1,477	1,588	1,851	263	16.5
Netherlands	14	13	30	32	14	-18	-56.9
Taiwan	882	761	810	833	1,282	449	53.9
Sweden	652	1,073	846	811	1,204	393	48.5
All other	4,829	5,219	4,610	3,999	4,935	936	23.4
Total	27,174	27,948	30,982	39,341	49,220	9,879	25.1
EU-15	2,856	3,642	2,894	2,366	2,968	601	25.4
EU-25	2,880	3,667	2,950	2,549	3,327	777	30.5
OPEC	58	40	31	44	93	50	112.9
Latin America	5,340	5,304	5,704	6,392	6,505	113	1.8
CBERA	25	27	59	107	103	-4	-3.9
Asia	14,000	15,313	19,195	26,978	35,290	8,312	30.8
Sub-Saharan Africa	6	6	10	6	5	-1	-16.6
Central and Eastern Europe	49	30	52	180	363	183	101.7

See footnote(s) at end of table.

Table ET-3—*Continued*

Telephone and telegraph apparatus (ET017): **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005**[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
	Million dollars						
U.S. merchandise trade balance:							
China	-2,348	-3,903	-5,387	-8,940	-13,765	-4,825	-54.0
Malaysia	-1,791	-2,092	-3,357	-3,628	-7,393	-3,766	-103.8
Mexico	-2,201	-2,882	-3,436	-4,339	-4,186	153	3.5
Korea	-4,065	-4,152	-5,563	-8,208	-6,039	2,169	26.4
Canada	-1,854	-1,404	-1,054	-1,208	-1,835	-627	-51.9
Thailand	-239	-250	-633	-1,348	-2,409	-1,061	-78.7
Japan	-946	-844	-619	-453	-956	-503	-111.2
Netherlands	662	897	680	1,224	1,720	496	40.5
Taiwan	-548	-514	-599	-495	-1,077	-582	-117.7
Sweden	-571	-1,004	-760	-768	-1,129	-361	-47.0
All other	3,233	1,154	691	2,779	2,031	-748	-26.9
Total	-10,668	-14,996	-20,037	-25,382	-35,038	-9,655	-38.0
EU-15	1,384	-477	-272	1,021	881	-140	-13.7
EU-25	1,485	-365	-214	969	692	-277	-28.6
OPEC	385	455	349	690	770	81	11.7
Latin America	-902	-2,265	-2,934	-2,740	-3,028	-288	-10.5
CBERA	584	514	510	454	503	48	10.6
Asia	-9,605	-11,632	-16,168	-23,011	-31,502	-8,491	-36.9
Sub-Saharan Africa	131	112	160	208	241	33	15.7
Central and Eastern Europe	141	135	76	-17	-157	-139	-803.5

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Sector demand was also driven by growing investment in telecommunication network upgrades by service providers, the principal customers for sector equipment. These upgrades were in response to the greater bandwidth requirements necessary to provide multimedia applications combining voice, data, and video and to allow greater speed, flexibility, and security.[6]

In addition, the growth in U.S. sector imports has been affected by the increasingly competitive market for many sector products, which have driven contract manufacturers, the major producers of telephone and telegraph apparatus, to locate production facilities in low-cost countries such as China, Malaysia, and Thailand.[7] This has encouraged not only greater U.S. reliance on imports for telephone and telegraph apparatus but also has caused major shifts in the source of those imports. In 2001, Canada, the EU-15 and Japan collectively supplied 34 percent of U.S. sector imports while the collective share of China, Malaysia, and Thailand was 20 percent. By 2005, the former group accounted for 16 percent of total sector imports while the latter's share had increased to 50 percent.

John Davitt
(202) 205-3407
john.davitt@usitc.gov

[6] Standard and Poor's, *Industry Surveys: Communications Equipment*, 1-2.

[7] See, for example, SEC 2005 Form 10-K filings for Flextronics International Ltd., Solectron Corporation, and Jabil Circuit, Inc.

Television Receivers and Video Monitors[1]

Change in 2005 from 2004:

U.S. trade deficit: Increased by $5.2 billion (31 percent) to $21.9 billion
U.S. exports: Decreased by $16.6 million (2 percent) to $857.2 million
U.S. imports: Increased by $5.2 billion (30 percent) to $22.7 billion

Imports of television receivers and video monitors grew by $5.2 billion (30 percent) to $22.7 billion, reflecting increased demand for more expensive flat-panel display color television receivers (CTVs) and interactive set top boxes (STBs)[2] with integral tuners, and decreased demand for less costly, older technology cathode ray tube (CRT) sets. Few of these products are made in the United States; the trade deficit grew as a result.

Mexico, China, and Japan continued to be the largest suppliers to the United States of commodity group imports, accounting for $17.8 billion (78 percent) of imports in 2005 versus $13.2 billion (75 percent) of imports in 2004. China ($5.1 billion) exceeded Japan ($2.6 billion) to become the second-largest supplier to the United States in 2005 (table ET-4).

U.S. exports

U.S. exports declined by $16.6 million (2 percent) to $857.2 million, principally due to reduced U.S. production of CRT CTVs and parts of television reception apparatus. Most former U.S. producers of CTVs have shifted production from the United States to Mexico and elsewhere. Although CRT CTV production continues in the United States, the trend is away from CRT CTVs to CTVs using other display technology.

U.S. imports

The increase in U.S. imports of television receivers and video monitors in 2005 was due principally to an increase in imports of two products: flat-panel direct-view CTVs with a display diagonal greater than 34.29cm (13.5 inches), not incorporating a videocassette or DVD recorder or player, and interactive STBs with integral tuners (see table ET-5). These two products combined accounted for $10.6 billion (47 percent) of commodity group imports in 2005 and for $4.9 billion (93 percent) of the increase in imports. Imports of non-high definition flat-panel direct view video monitors combined with VCRs or (more likely) DVD players also increased significantly, rising by 83 percent to $1.3 billion.

---

[1] This industry/commodity group includes television receivers and video monitors (not computer monitors), set top boxes with a communications function and integral tuners, and parts of the foregoing. Set top boxes (STBs) with a communications function but without an integral tuner are not included in this digest.

[2] The term originally described a channel selector allowing households to watch broadband cable channels. Subsequently, STB was also used to describe the indoor element of a satellite receiver. Usually the STB contains some form of decoder to allow access to encrypted and scrambled pay-TV channels. The digital STB also has the function of converting the digital TV channels to the analog form needed to view on a standard TV set. Spidersat Communications, “Glossary.”

Table ET-4
Television receivers and video monitors (ET022): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
	Million dollars						
U.S. exports of domestic merchandise:							
Mexico	396	406	171	191	211	20	10.6
China	14	22	31	40	44	4	9.7
Japan	44	19	17	21	20	-1	-3.7
Taiwan	9	16	11	10	10	([2])	2.1
Thailand	5	2	3	3	1	-2	-56.1
Malaysia	7	9	8	6	3	-3	-45.6
Korea	19	12	15	39	25	-14	-36.7
Canada	379	452	296	291	260	-31	-10.7
Indonesia	2	1	4	1	([2])	-1	-58.7
Belgium	35	27	5	3	3	([2])	0.3
All other	328	292	247	268	279	11	4.1
Total	1,237	1,257	809	874	857	-17	-1.9
EU-15	149	129	111	105	100	-5	-5.2
EU-25	152	133	113	107	105	-3	-2.5
OPEC	31	15	11	24	32	8	32.5
Latin America	521	526	253	292	330	38	12.9
CBERA	42	43	39	36	42	6	16.0
Asia	142	108	122	156	133	-23	-14.7
Sub-Saharan Africa	6	2	2	4	3	-1	-24.7
Central and Eastern Europe	5	5	3	3	6	3	79.7
U.S. imports of merchandise for consumption:							
Mexico	5,071	5,165	5,532	7,743	10,029	2,286	29.5
China	263	849	1,490	2,438	5,130	2,691	110.4
Japan	1,280	1,678	2,229	2,987	2,605	-382	-12.8
Taiwan	155	226	526	1,140	1,699	559	49.0
Thailand	521	732	682	928	1,015	87	9.3
Malaysia	779	1,295	1,019	863	955	92	10.7
Korea	240	353	816	1,054	809	-245	-23.3
Canada	16	13	14	8	35	28	358.1
Indonesia	91	106	89	59	123	64	108.9
Belgium	49	65	74	70	90	20	28.3
All other	149	103	182	219	221	2	1.0
Total	8,615	10,586	12,654	17,509	22,712	5,202	29.7
EU-15	101	117	148	154	148	-6	-3.7
EU-25	101	119	149	154	149	-5	-3.1
OPEC	91	106	89	59	123	64	108.9
Latin America	5,094	5,172	5,546	7,769	10,044	2,275	29.3
CBERA	4	3	2	7	4	-4	-49.7
Asia	3,357	5,270	6,912	9,554	12,462	2,908	30.4
Sub-Saharan Africa	([2])	([2])	2	3	([2])	-2	-93.7
Central and Eastern Europe	1	2	21	8	1	-7	-85.1

See footnote(s) at end of table.

Table ET-4—*Continued*
Television receivers and video monitors (ET022): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	*Percent*
	Million dollars						
U.S. merchandise trade balance:							
Mexico	-4,675	-4,760	-5,362	-7,552	-9,818	-2,266	-30.0
China	-250	-828	-1,459	-2,398	-5,086	-2,687	-112.0
Japan	-1,237	-1,660	-2,212	-2,966	-2,585	381	12.9
Taiwan	-146	-210	-515	-1,130	-1,689	-559	-49.4
Thailand	-517	-730	-679	-925	-1,013	-88	-9.5
Malaysia	-772	-1,286	-1,011	-856	-952	-95	-11.1
Korea	-221	-341	-801	-1,015	-784	231	22.7
Canada	363	439	282	284	225	-59	-20.8
Indonesia	-89	-105	-85	-58	-123	-65	-112.2
Belgium	-15	-38	-69	-67	-87	-20	-29.7
All other	179	190	65	49	58	9	17.6
Total	-7,378	-9,329	-11,845	-16,636	-21,854	-5,219	-31.4
EU-15	48	12	-37	-49	-48	([2])	0.4
EU-25	51	14	-35	-47	-45	2	4.3
OPEC	-60	-91	-78	-35	-91	-56	-162.5
Latin America	-4,574	-4,646	-5,293	-7,477	-9,714	-2,237	-29.9
CBERA	37	40	37	29	38	9	32.4
Asia	-3,214	-5,162	-6,790	-9,398	-12,329	-2,931	-31.2
Sub-Saharan Africa	6	2	1	1	3	1	122.2
Central and Eastern Europe	4	3	-18	-4	5	9	([3])

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Less than $500,000.
[3]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table ET-5
Changes in U.S. imports of television receivers and video monitors, 2001–05

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	*Percent*
	million dollars						
Certain flat-panel TV receivers	95	310	1,109	3,234	6,865	3,632	112
Certain color TV set top boxes	175	279	1,042	2,498	3,716	1,219	49
Certain flat-panel video monitor combinations	29	134	419	728	1,332	604	83
Certain projection television combinations	1,160	1,330	1,308	1,003	413	-590	-59
Other	7,155	8,533	8,776	10,047	10,385	338	3
Total	8,615	10,586	12,654	17,509	22,712	5,202	30

Note.–Calculations based on unrounded data.
Source: Compiled from official statistics of the U.S. Department of Commerce.

Partially offsetting these increases were significant decreases in the imports of CRT projection televisions combined with VCRs or DVD players, which declined by 59 percent to $413 million, and of CRT direct-view CTVs with screen size exceeding 35.56cm (14 inches), which declined by 13 percent to $2.3 billion.

In 2005, U.S. consumer demand continued to shift away from CRT CTVs to flat-panel display CTVs and monitors, which offer viewers a larger picture without using as much floor or shelf space as comparably sized, but bulkier and heavier, CRT CTVs.[3] The Consumer Electronics Association reported that an estimated $7.3 billion of direct-view flat-panel CTVs were sold at the factory level[4] in 2005, an 86 percent increase over 2004 sales of $3.9 billion. At the same time, direct-view CRT CTV sales declined to $3.5 billion in 2005, an 18 percent reduction from $4.3 billion in 2004. In 2004, the sales value of direct-view CTVs was split almost evenly between CRT and flat-panel CTVs–52 percent versus 48 percent, respectively.[5] It is estimated that flat-panel CTVs accounted for over two-thirds–68 percent–of the sales value of direct-view CTVs in 2005.[6] U.S. production of flat-panel display CTVs and monitors is small and most demand is supplied by imports.

The average value of imported flat-panel direct-view CTVs with screen size greater than 34.29cm (14 inches) grew from $445 in 2001 to $1,053 in 2004, then dropped to $863 in 2005. Unit imports of these flat-panel CTVs increased by 159 percent in 2005, and have increased by 3,630 percent since 2001. These CTVs accounted for over 90 percent of the value of all flat-panel CTVs imported in 2005. As the average value of flat-panel CTVs decreases, the quantity demanded is expected to continue to grow.

Imports from the three top suppliers–Mexico, China, and Japan–continued to increase, and accounted for 88 percent of the value of 2005 imports of flat-panel CTVs, with Mexico accounting for over 62 percent. China exceeded Japan as the second-largest supplier to the United States of flat-panel CTVs, as imports from China more than doubled to $5.1 billion. However, imports from China were just over half the value of imports from Mexico, the largest supplier. An antidumping finding in April 2004 led to the imposition of antidumping

[3] Wolk, “For TV Retailers.” For example, a 32-inch CRT direct-view CTV can weigh as much as 140 pounds, while a 32-inch flat-panel direct-view CTV can weigh as little as 50 pounds.
[4] Includes both U.S.-produced and imported CTVs.
[5] Direct-view CTVs accounted for 59 percent of non-combination CTV sales in 2004 and 70 percent in 2005.
[6] Consumer Electronics Association, “U.S. Consumer Electronics .”

duties ranging from 9.69 percent to 78.45 percent[7] on imports from China of CRT direct-view CTVs with screen size greater than 35.56cm (14 inches); imports of such CTVs from China fell by 45 percent between 2004 and 2005.

Demand for STBs with integral tuners is increasing as consumers switch to direct-broadcast satellite television service or to interactive cable television service. The new services include pay-per-view, video-on-demand, and interactive program guides, and it is anticipated that other services will become available as the population of interactive boxes grows.[8] In addition, as more high definition programming is available, demand for STBs with high definition (HDTV) tuners is increasing, leading to higher imports.

The value of imports of STBs products rose by 49 percent, as unit imports increased by 24 percent, and unit value increased by 20 percent. Imports from Mexico accounted for 61 percent of the value of U.S. imports of STBs in 2005, down from 72 percent in 2004. The next largest suppliers, Taiwan and China, gained ground at the expense of Mexico, increasing to 20 percent and 11 percent of total imports, respectively. These three countries combined accounted for over 91 percent of U.S. imports in 2004 and 2005.

Although imports of HDTV receivers and video monitors increased by 25 percent (up from 8 percent in 2004), they constituted only 4 percent of imports of receivers and monitors in 2005. Cable companies and satellite broadcasters are moving rapidly towards providing HDTV service.

John Kitzmiller
(202) 205-3387
john.kitzmiller@usitc.gov

[7] Department of Commerce, "Notice of Amended Final Determination," 28879-80.

[8] Telephone interviews with Steve Hill, Satellite Broadcasting and Communications Association, March 31, 2005, and Paul Rodriguez, National Cable Television Association, April 1, 2005.

Computers, Peripherals, and Parts

Change in 2005 from 2004:

U.S. trade deficit: Increased by $3.2 billion (5 percent) to $65.1 billion
U.S. exports: Increased by $1.5 billion (5 percent) to $28.9 billion
U.S. imports: Increased by $4.7 billion (5 percent) to $94.0 billion

The U.S. trade deficit in the computers, peripherals, and parts sector continued to increase in 2005 to $65.1 billion, but at a slower pace than in previous years (table ET-6). Compared to 2004, last year's expansion of the trade deficit was smaller, due in part to slower growth in U.S. imports but mainly to growth in U.S. exports for the first time in several years. In 2005, overall personal computer (PC) worldwide demand continued to expand–units of worldwide PC shipments grew by 16 percent in 2005– primarily because of increased demand for laptop computers and declining prices of computers.[1]

Worldwide shipments of PCs continued to grow in 2005, led by factors such as strong demand from small and medium-sized businesses and strength in the laptop market.[2] Industry consolidation, competitive pricing, continued PC replacement, and consumers striving for mobility were all factors driving strong demand for computers in 2005.[3] One industry source indicated that the weak dollar contributed somewhat to stronger PC sales worldwide by promoting consumer purchases abroad.[4]

U.S. exports

U.S. exports grew for the first time since 2000, primarily because of factors such as increased worldwide demand for computer products, growing international markets, and a need for computer inputs in manufacturing facilities abroad. U.S. exports to Canada, Malaysia, and China accounted for almost 58 percent of sector growth in 2005. In particular, U.S. exports to Canada experienced an increase of $367 million (10 percent) to $4.2 billion dollars. Increases were concentrated in areas such as computer peripherals and desktop systems. The United States is a primary supplier of computer hardware and peripherals to Canada, and growing demand for these products combined with a continued PC replacement cycle played a role in the United States' computer hardware trade surplus with Canada.[5] Meanwhile, a majority of U.S. export increases to Malaysia and China, which are large computer manufacturing locations, consisted of inputs for the production of computer systems, such as computer parts and disk drive storage devices.

U.S. imports

China continued to be a leading source of imports for the computer industry, with U.S. imports increasing by $6.3 billion (19 percent) in 2005 to $40.3 billion. Laptop computers, the leading import item, accounted for over 26 percent of all sector imports from China;

[1] Kanellos, "PC market surged in 2005."
[2] Graham-Hackett, "Industry Surveys–Computers: Hardware," 1.
[3] Ibid. and Gartner Press Release, "Gartner Says Lower Prices."
[4] Techweb News, "Report: PC Shipments Remain Strong;" and Gardner, "1Q PC Shipments Rose, Weak Dollar Credited."
[5] Michigan District Export Council, "2005 Washtenaw County."

Table ET-6
Computers, peripherals, and parts (ET035): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
	Million dollars						
U.S. exports of domestic merchandise:							
China	1,209	892	1,022	1,038	1,246	208	20.1
Malaysia	617	643	459	459	759	301	65.6
Mexico	3,188	3,612	2,660	2,646	2,442	-204	-7.7
Japan	3,780	2,498	2,246	2,040	1,871	-170	-8.3
Singapore	1,380	1,125	1,461	1,313	1,463	150	11.4
Canada	4,987	3,948	3,655	3,834	4,201	367	9.6
Taiwan	763	611	509	502	474	-28	-5.7
Korea	1,078	832	655	580	570	-10	-1.7
Thailand	411	367	492	551	675	124	22.5
United Kingdom	3,269	2,371	2,260	2,427	2,278	-148	-6.1
All other	17,443	12,635	12,617	11,958	12,882	924	7.7
Total	38,125	29,534	28,038	27,350	28,862	1,512	5.5
EU-15	12,730	9,298	9,357	8,368	8,226	-142	-1.7
EU-25	12,939	9,467	9,537	8,540	8,435	-105	-1.2
OPEC	559	388	362	580	740	159	27.5
Latin America	6,482	5,894	4,835	5,152	5,522	371	7.2
CBERA	570	509	466	497	607	109	22.0
Asia	11,411	8,547	8,292	7,943	8,746	803	10.1
Sub-Saharan Africa	177	153	191	186	195	9	5.0
Central and Eastern Europe	227	198	219	206	267	61	29.7
U.S. imports of merchandise for consumption:							
China	10,548	14,928	22,141	33,985	40,298	6,313	18.6
Malaysia	7,347	9,085	9,978	11,171	12,658	1,487	13.3
Mexico	10,365	8,913	7,640	7,794	7,161	-632	-8.1
Japan	10,200	8,734	6,977	6,799	6,536	-263	-3.9
Singapore	7,904	7,630	7,151	6,977	6,217	-760	-10.9
Canada	2,836	1,745	1,533	1,739	1,831	92	5.3
Taiwan	8,803	8,725	7,046	6,213	4,948	-1,265	-20.4
Korea	4,622	4,600	3,686	3,781	2,995	-786	-20.8
Thailand	2,306	2,382	2,065	2,498	2,833	334	13.4
United Kingdom	1,539	1,021	1,069	1,179	899	-280	-23.7
All other	8,078	8,054	7,654	7,129	7,574	445	6.2
Total	74,547	75,817	76,940	89,264	93,950	4,685	5.2
EU-15	4,504	4,226	4,455	4,376	4,113	-262	-6.0
EU-25	5,395	4,944	5,173	5,243	5,121	-122	-2.3
OPEC	662	476	441	519	462	-57	-11.0
Latin America	10,557	9,110	7,818	8,000	7,651	-348	-4.4
CBERA	112	121	123	167	457	290	173.2
Asia	55,224	59,625	62,040	73,882	78,865	4,983	6.7
Sub-Saharan Africa	8	8	18	7	6	-1	-15.8
Central and Eastern Europe	892	719	721	866	1,004	138	15.9

See footnote(s) at end of table.

Table ET-6—*Continued*
Computers, peripherals, and parts (ET035): U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
	Million dollars						
U.S. merchandise trade balance:							
China	-9,339	-14,036	-21,119	-32,947	-39,052	-6,105	-18.5
Malaysia	-6,730	-8,441	-9,518	-10,712	-11,899	-1,187	-11.1
Mexico	-7,177	-5,301	-4,979	-5,147	-4,719	428	8.3
Japan	-6,420	-6,236	-4,731	-4,758	-4,665	93	2.0
Singapore	-6,524	-6,505	-5,689	-5,663	-4,753	910	16.1
Canada	2,151	2,203	2,122	2,095	2,370	275	13.1
Taiwan	-8,040	-8,114	-6,538	-5,711	-4,475	1,237	21.7
Korea	-3,544	-3,768	-3,031	-3,201	-2,424	776	24.2
Thailand	-1,895	-2,015	-1,573	-1,947	-2,157	-210	-10.8
United Kingdom	1,730	1,350	1,192	1,248	1,379	131	10.5
All other	9,365	4,580	4,963	4,829	5,308	479	9.9
Total	-36,422	-46,283	-48,902	-61,914	-65,087	-3,173	-5.1
EU-15	8,226	5,072	4,902	3,992	4,112	120	3.0
EU-25	7,544	4,524	4,363	3,297	3,314	17	0.5
OPEC	-103	-89	-79	62	278	216	350.3
Latin America	-4,075	-3,216	-2,983	-2,848	-2,129	719	25.3
CBERA	458	388	343	330	149	-181	-54.8
Asia	-43,813	-51,078	-53,747	-65,939	-70,120	-4,181	-6.3
Sub-Saharan Africa	169	145	172	179	190	10	5.8
Central and Eastern Europe	-665	-521	-502	-661	-737	-76	-11.6

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

other leading imports included display units, computer parts, and peripherals. One factor leading to the significant increase in laptop imports from China is the movement of production by Taiwanese producers to China over the past few years. Leading Taiwanese manufacturers that produce laptops for large original equipment manufacturers such as Hewlett-Packard have located facilities on the mainland to take advantage of lower labor costs.[6] Consequently, imports of portable computers such as laptops from Taiwan have continually decreased since 2002. From 2000-2005, imports of laptops from Taiwan declined from $3.8 billion to $372 million (90 percent). One industry source indicates that most laptop manufacturing assembly in China occurs due to original equipment manufacturer orders and that Chinese firms are still lacking core technologies for production.[7]

The second-leading source of imports was Malaysia, which also expanded its shipments of computer products to the United States in 2005. Over half of all imports of computer equipment from Malaysia consisted of portable computers such as laptops. Large manufacturers such as Dell have production facilities in Malaysia,[8] accounting for a majority of computer equipment shipped to the United States. Meanwhile, U.S. imports of computer equipment from almost all other major trading partners, with the exceptions of Canada and Thailand, decreased in 2005. However, increases in imports from China and Malaysia more than offset any import decreases from the other trading partners.

Queena Fan
(202) 205-3055
queena.fan@usitc.gov

[6] Eighty-five percent of Taiwanese laptop manufacturers' output is estimated to be located in China, up from approximately 4 percent in 2001. Dean and Tam, "The Laptop Trail."

[7] People's Daily Online, "E. China city exports 16 million laptops in 2005."

[8] Currently, 95 percent of Dell's notebooks for the U.S. market are assembled in their Penang, Malaysia, facility. Tzeng, "Dell to move assembly."

Medical Goods

Change in 2005 from 2004

U.S. trade surplus: Increased from a deficit of $573 million to a surplus of $422 million
U.S. exports: Increased by $2.5 billion (14 percent) to $ 21.0 billion
U.S. imports: Increased by $1.5 billion (8 percent) to $20.5 billion

After experiencing its first trade deficit in two decades in 2004, the U.S. medical goods industry registered a trade surplus in 2005, with strong gains in exports to most of its major overseas markets. While U.S. imports also increased, they grew more slowly than exports. The growth in U.S. medical goods exports was largely driven by advanced technology products. Among these were implantable cardiac defibrillators, electronic instruments that deliver brief electronic shocks to restore normal rhythm to a failing heart; drug eluting stents, which consist of tiny wire mesh-like tubes coated with drugs that are inserted into coronary blood vessels to keep them from closing after they are opened in a procedure known as balloon angioplasty; and orthopedic products incorporating materials promoting bone growth to facilitate fusion of bone with vertebrae in spinal and degenerative disc procedures.[1]

U.S. exports

U.S. exports of medical goods increased by almost 14 percent in 2005, to $21.0 billion (table ET-7). The most significant export growth was to the EU, Mexico, and China, while Japan continued to be the most important single country market for U.S.-manufactured medical products.[2] Within the EU, U.S. exports rose to $2.3 billion to the Netherlands and $1.2 billion to the United Kingdom, representing 18 percent gains in exports to each of those markets over 2004. Although a significant portion of U.S. exports to the Netherlands represented intracompany transactions between Dutch-based manufacturers with manufacturing operations in both the Netherlands and the United States, such as Philips Medical Systems,[3] the majority of shipments represented U.S.-made goods destined for other EU markets that were passing through the Dutch port of Rotterdam.[4] Following a period of stagnant growth in the 1990s, health expenditures in the United Kingdom have risen steadily in the past several years, reflecting “the UK government’s commitment to increase public spending on health.”[5] These expenditures have benefitted U.S. and other foreign suppliers of medical devices to that country and accounted for the increase in U.S. exports to the United Kindgom in 2005.

U.S. exports of medical devices to Mexico increased by 13 percent in 2005, and largely consisted of U.S.-made parts and components sent for final assembly into finished medical goods.[6] A large portion of the finished products was destined for consumption in U.S. and

---

[1] Gold and Diller, “Healthcare,” 3-7, 30, and 31; and Zimmer Inc., *Spinal Fusion*, 1-8.
[2] Yeo, *North America Medical Instruments*, 3; and Alch, *The U.S. Market for Medical Devices*, 8.
[3] On August 1, 2001, Philips acquired Agilent Technologies’ Healthcare Solutions Group of Andover, Massachusetts (formerly Hewlett-Packard Medical Systems), a major U.S. producer of patient monitoring systems. The purchase of Agilent’s healthcare business transformed Philips into the number two medical equipment provider in the world (after General Electric Medical Systems) with dual headquarters in Andover and Best, Netherlands, where it has long been a major global producer of medical imaging equipment.
[4] U.S. and Dutch industry officials, telephone interviews by Commission staff, March 9 and 21, 2006.
[5] *OECD Health Data 2005*, 1-2.
[6] U.S. industry officials, telephone interviews by Commission staff, March 15, 2006.

Table ET-7
Medical goods (ET040): **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005**[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	*Percent*
	Million dollars						
U.S. exports of domestic merchandise:							
Ireland	708	875	1,293	1,360	1,342	-18	-1.4
Germany	1,531	1,530	1,679	1,602	1,714	113	7.0
Japan	2,367	2,203	2,307	2,408	2,624	216	9.0
Mexico	689	848	983	1,030	1,163	133	12.9
Netherlands	1,058	1,284	1,618	1,940	2,283	343	17.7
Canada	1,235	1,204	1,337	1,510	1,701	191	12.7
United Kingdom	887	822	839	979	1,157	178	18.2
France	932	901	859	880	985	105	12.0
Switzerland	400	434	477	461	533	72	15.7
China	302	313	453	493	593	100	20.3
All other	4,879	4,646	4,983	5,771	6,874	1,103	19.1
Total	14,987	15,059	16,827	18,433	20,970	2,537	13.8
EU-15	6,922	7,074	8,059	8,854	9,832	978	11.1
EU-25	7,003	7,160	8,164	8,972	9,989	1,018	11.3
OPEC	230	193	197	250	336	86	34.3
Latin America	1,492	1,582	1,724	1,906	2,251	346	18.1
CBERA	185	212	249	248	297	49	19.6
Asia	3,742	3,608	3,974	4,241	4,854	612	14.4
Sub-Saharan Africa	96	92	93	113	154	41	36.6
Central and Eastern Europe	137	96	103	119	161	42	35.1
U.S. imports of merchandise for consumption:							
Ireland	1,358	1,807	2,853	4,056	3,707	-349	-8.6
Germany	1,599	1,931	2,342	2,883	3,308	425	14.7
Japan	1,279	1,329	1,327	1,501	1,694	193	12.9
Mexico	1,533	1,957	2,315	2,575	3,015	440	17.1
Netherlands	477	501	470	530	608	77	14.6
Canada	304	400	466	520	551	31	5.9
United Kingdom	347	415	439	527	646	119	22.6
France	401	469	510	604	638	34	5.6
Switzerland	401	708	1,204	1,142	1,069	-73	-6.4
China	459	531	594	710	864	155	21.8
All other	2,711	3,184	3,621	3,957	4,447	490	12.4
Total	10,869	13,232	16,143	19,006	20,548	1,542	8.1
EU-15	4,854	5,916	7,526	9,633	10,136	502	5.2
EU-25	4,880	5,970	7,591	9,720	10,200	479	4.9
OPEC	6	7	8	9	10	1	8.6
Latin America	2,200	2,701	3,260	3,493	3,996	504	14.4
CBERA	649	719	917	893	946	53	5.9
Asia	2,562	2,829	2,937	3,321	3,793	472	14.2
Sub-Saharan Africa	7	4	6	8	15	7	82.7
Central and Eastern Europe	25	52	62	83	59	-25	-29.6

See footnote(s) at end of table.

Table ET-7—*Continued*
Medical goods (ET040): **U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 2001–2005**[1]

Item	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
	Million dollars						
U.S. merchandise trade balance:							
Ireland	-650	-933	-1,560	-2,696	-2,365	330	12.3
Germany	-68	-401	-664	-1,282	-1,594	-312	-24.3
Japan	1,088	875	980	907	930	23	2.5
Mexico	-844	-1,109	-1,332	-1,546	-1,853	-307	-19.9
Netherlands	581	782	1,148	1,409	1,675	265	18.8
Canada	932	804	870	990	1,150	161	16.3
United Kingdom	540	407	399	452	511	59	13.0
France	531	432	350	276	348	71	25.9
Switzerland	-2	-274	-728	-681	-535	146	21.4
China	-157	-218	-141	-217	-271	-54	-25.1
All other	2,167	1,462	1,361	1,814	2,427	613	33.8
Total	4,119	1,826	683	-573	422	995	([2])
EU-15	2,068	1,158	533	-780	-303	476	61.1
EU-25	2,123	1,190	573	-749	-210	538	71.9
OPEC	224	186	189	241	326	85	35.3
Latin America	-708	-1,120	-1,536	-1,587	-1,745	-158	-10.0
CBERA	-464	-506	-668	-645	-649	-4	-0.7
Asia	1,181	779	1,037	921	1,061	140	15.2
Sub-Saharan Africa	90	88	87	105	139	35	33.0
Central and Eastern Europe	112	44	41	36	102	66	186.4

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data. The countries shown are those with the largest total U.S. trade (U.S. imports plus exports) in these products in 2005.

Source: Compiled from official statistics of the U.S. Department of Commerce.

third-country markets rather than in Mexico, as healthcare expenditures in that country lagged well behind the OECD average.[7] Meanwhile, U.S. exports to China rose by 20 percent to $593 million, as demands for better healthcare by China's growing middle class led to increased expenditures on medical devices, including U.S.-made medical goods.[8] Finally, after several years of slow growth in Japanese imports of U.S.-made medical equipment, as the Japanese government attempted to control escalating healthcare costs, U.S. exports to that country rose by 9 percent in 2005, increasing the sectoral U.S. trade surplus with Japan to $930 million. U.S. medical device makers benefitted from efforts by the Japanese government in 2005 to redress growing imbalances in healthcare expenditures with other OECD countries[9] by encouraging increased purchases of more advanced medical technology, including cardiac defibrillators and drug eluting stents, manufactured primarily in the United States.[10]

U.S. imports

U.S. imports of medical goods increased by 8 percent in 2005, led by double-digit increases in imports from Germany, the United Kingdom, and China. Meanwhile imports from Switzerland and Ireland, the largest and fastest growing foreign supplier of medical devices to the United States in recent years, declined slightly.

U.S. imports from Germany, the largest EU manufacturer of medical goods, increased by 15 percent to $3.3 billion. Such imports consisted of a broad range of medical instruments for diagnostic and therapeutic applications, including general medical instruments and hospital supplies, electromedical breathing systems, patient monitoring systems, and medical imaging instruments.[11] U.S. imports of medical goods from the United Kingdom, meanwhile, grew by 23 percent to $646 million, and included such products as innovative knee and hip implants and arthroscopic surgical instrumentation.[12] Swiss exports of medical goods to the United States declined by 6 percent to $1.1 billion, consisting partly of cardiac pacemakers manufactured by a Swiss subsidiary of a major U.S.-based manufacturer, and orthopedic devices from a major Swiss producer.[13] Although Ireland remained the leading supplier of U.S. imports of medical goods, its exports to the United States declined by 9 percent in 2005, after almost tripling from 2001 to 2004, as Irish subsidiaries of U.S. high-tech producers directed a greater portion of their sales to fast-growing markets in other EU countries.[14]

Finally, U.S. imports from China continued their steady rise over the past 5 years, increasing by 22 percent to $864 million. China's exports to the United States included diagnostic imaging devices, such as CT Scanners and traditional x-ray apparatus, produced by

---

[7] *OECD Health Data 2005*, 1-2.

[8] According to medical device industry analysts, China's medical device market has grown at an average of about 20 percent a year since 2000, and more than doubled in the past two years. The market now is the second leading market for medical devices in Asia, after Japan, and the world's fastest growing healthcare market in the world. Von Hassell and Bella, "Diagnosing China's Medical Device Market," 1-5; and "As China's Capabilities Grow," 1-6.

[9] "How Does Japan Compare," *OECD Health Data 2005*, 1.

[10] U.S. industry officials, telephone interviews by Commission staff, March 13 and 16, 2006.

[11] Salama, "Medical Devices," 1-21.

[12] *Smith & Nephew Press Releases,* 1-2.

[13] Alch, *The U.S. Market for Medical Devices*, 8; Medtronic, Inc., Medtronic Switzerland at a Glance, 1; and Medtronic Inc., SEC 10-K filings.

[14] U.S. industry officials, telephone interviews by Commission staff, March 20-21, 2006.

subsidiaries of major U.S., Japanese, and European manufacturers.[15] Other major U.S. imports of Chinese medical equipment included less sophisticated oxygen therapy apparatus and massage apparatus, produced mainly by smaller indigenous Chinese producers.[16]

Christopher Johnson
(202) 205-3488
Christopher.Johnson@usitc.gov

[15] U.S. industry officials, telephone interviews by Commission staff, March 22, 2006; "General Electric Medical to Double Business," 1; "GE Medical Systems Unveils Industrial Park," 1; and "Philips Sets Up Medical Equipment Venture in China," 1-2.

[16] Von Hassell and Bella, "Diagnosing China's Medical Device Market," 1-5.

Bibliography (Electronic Products)

Alch, Darren W. *The U.S. Market for Medical Devices–Opportunities and Challenges for Swiss Companies.* Chicago: Swiss Business Hub USA, 2004. http://www.swissemb.org/trade (accessed March 5, 2006).

"As China's Capabilities Grow, OEMs Face Pros and Cons of Sourcing from Chinese Market." *Medical Product Outsourcing,* September 2005. http://mpo-mag.com (accessed March 7, 2006).

Associated Press. "Flat Panels Dim TV Tube Era," December 1, 2005. http://news.cincypost.com/apps/pbcs.dll/article?AID=/20051201/BIZ/512010346/1001 (accessed March 23, 2006).

Cal Trade Report. "Sony to Shutter San Diego Facility," January 25, 2006. http://www.caltradereport.com/eWebPages/page-two-1138198603.html (accessed March 23, 2006).

Consumer Electronics Association. "U.S. Consumer Electronics Sales and Forecasts, 2001-2006." January 2006.

Dean, Jason and Pui-Wing Tam. "The Laptop Trail." *Wall Street Journal Online*, June 9, 2005. http://online.wsj.com (accessed March 15, 2006).

Department of Commerce. International Trade Administration. "Notice of Amended Final Determination of Sales at Less Than Fair Value: Certain Color Television Receivers From the People's Republic of China." *Federal Register* 69, no. 97 (May 2004): 28879-80.

Gardner, W. David. "1Q PC Shipments Rose, Weak Dollar Credited." April 15, 2005. http://informationweek.com/story/showArticle.jhtml?articleID=160901703 (accessed April 20, 2006).

Gartner Press Release. "Gartner Says Lower Prices and Mobility Drive Worldwide PC Shipments to 17 Percent Increase in Third Quarter 2005." October 18, 2005. http://www.gartner.com/press_releases/asset_138122_11.html (accessed March 20, 2006).

"GE Medical Systems Unveils Industrial Park." *People's Daily Online*, Oct. 23, 2003. http://english.people.com.cn (accessed March 7, 2006).

"General Electric Medical to Double Business," 2004. http://www.yeworld.net (accessed March 6, 2006).

Global Trade Information Service. *World Trade Atlas* (accessed March 28, 2006).

Gold, Robert, and Wendy Diller. "Healthcare: Products and Supplies." *Standards & Poor's Industry Surveys*. February 23, 2006.

Graham-Hackett, Megan. "Industry Surveys–Computers: Hardware." *Standard & Poor's Industry Surveys*, December 8, 2005, 1. http://www.netadvantage.standardandpoors.com (accessed March 8, 2006).

Kanellos, Michael. “PC market surged in 2005, will settle in 2006.” *CNet.com,*January 18, 2006. http://news.com.com/PC+market+surged+in+2005,+will+settle+in+2006/2100-1003_3-6028454.html (accessed March 17, 2006).

McClean, Bill, Brian Matas, and Trevor Yancey. *The McClean Report: A Complete Analysis and Forecast of the Integrated Circuit Industry*. 1-1. Richard D. Skinner, 2006 Edition, Arizona, IC Insights, Inc., 2006.

Medtronic, Inc. *Medtronic Switzerland at a Glance*, 2005. http://www.medtronic.com (accessed March 6, 2006).

Medtronic, Inc. SEC 10-K filings, 2003-2005.

Mergent Online. “The Asia-Pacific IT & High Technology Sectors,” May 2005. http://www.mergentonline.com (accessed March 15, 2006).

Michigan District Export Council. *2005 Washtenaw County International Economic Impact Study–Computer Hardware*, August 10, 2005. http://www.exportmichigan.com/michigan_iis_washtenaw05_computer.htm (accessed March 16, 2006).

Organization for Economic and Development (OECD). “How Does the United Kingdom Compare?” *OECD Health Data 2005*. http://www.oecd.org (accessed March 6, 2006).

Pappalardo, Denise. “Study: Telecom is over the hump,” *Networkworld*, February 6, 2006. http://www.networkworld.com/news/2006/021606-telecom.html (accessed March 17, 2006).

People’s Daily Online. “E. China city exports 16 million laptops in 2005,” January 23, 2006. http://english.people.com.cn/200601/23/eng20060123_237477.html (accessed March 16, 2006).

“Philips Sets Up Medical Equipment Venture in China.” *Appliance Magazine*, February 10, 2004. http://www.appliancemagazine.com (accessed March 16, 2006).

Photo Marketing Association International. “Photo Industry 2005: Review and Forecast,” February 2005. http:/www.pmai.org (accessed March 15, 2006).

Salama, Annette. *U.S. & Foreign Commercial Service and U.S. Department of State*. “Medical Devices.” *US&FCS Market Research Reports*, August 14, 2004.

Securities and Exchange Commission. *2005 Form 10-K filings for Flextronics International Ltd., Solectron Corporation, and Jabil Circuit, Inc.*

“Smith & Nephew’s CAS System To Allow Precise Knee Implants” and “Smith & Nephew's Endoscopy Breaks New Ground with BIORAPTOR* Suture Anchor for Hip Arthroscopy.” *Smith & Nephew Press Releases*, August 25, 2005 and March 22, 2006. http://www.smith-nephew.com.

Spidersat Communications. “Glossary.” http://www.spidersat.net/index.htm (accessed March 20, 2006.)

Standard and Poor's. *Industry Surveys: Communications Equipment.* http://www.netadvantage.standardandpoors.com (accessed March 23, 2006).

Techweb News. "Report: PC Shipments Remain Strong," June 10, 2005. http://informationweek.com/story/showArticle.jhtml?articleID=164900354 (accessed March 20, 2006).

Telecommunications Industry Association. *2006 Telecommunications Market Review and Forecast.* Washington, DC: TIA, 2006.

Tzeng, David. "Dell to move assembly of all notebooks for the US market to Malaysia." *Digitimes.com*, January 26, 2006. http://www.digitimes.com/systems/a20060126PR214.html (accessed March 15, 2006).

Von Hassell, Agostino, and Mark Bella. "Diagnosing China's Medical Device Market." Modern Plastics, January 1, 2006. http://www.modplas.com (accessed March 6, 2006)

Wolk, Martin. "For TV Retailers, the World Is Getting Flat." December 6, 2005. http://www.msnbc.msn.com/id/10340037/ (accessed March 20, 2006).

Yeo, Pong Wui. *The North America Medical Instruments & Equipment Sectors*. Charlotte: Mergent, Inc. August 2005. http://webreports.mergent.com (accessed March 16, 2006).

Zimmer Inc. *Spinal Fusion, Patient Information*, June 2004. http://www.zimmer.com (accessed March 16, 2006).

Table ET-8
Electronic products : U.S. trade for industry/commodity groups and subgroups, 2001-2005[1]

USITC code[2]	Industry/commodity group	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	Change, 2005 from 2004 *Percent*
		Million dollars						
ET016	Office machines:							
	Exports	1,061	816	725	682	751	69	10.1
	Imports	1,817	1,491	1,544	1,732	1,793	60	3.5
	Trade balance	-757	-675	-819	-1,050	-1,041	9	0.8
ET017	Telephone and telegraph apparatus:							
	Exports	16,506	12,952	10,946	13,958	14,183	224	1.6
	Imports	27,174	27,948	30,982	39,341	49,220	9,879	25.1
	Trade balance	-10,668	-14,996	-20,037	-25,382	-35,038	-9,655	-38.0
ET018	Consumer electronics (except televisions):							
	Exports	2,791	2,631	2,392	2,518	2,679	161	6.4
	Imports	19,525	21,455	21,471	24,428	25,866	1,438	5.9
	Trade balance	-16,734	-18,825	-19,079	-21,911	-23,187	-1,277	-5.8
ET019	Blank media:							
	Exports	1,017	970	1,082	1,159	1,195	37	3.2
	Imports	2,423	2,746	3,127	3,831	4,248	418	10.9
	Trade balance	-1,406	-1,776	-2,045	-2,672	-3,053	-381	-14.3
ET020	Prerecorded media:							
	Exports	3,195	3,069	3,010	3,124	3,422	299	9.6
	Imports	1,259	1,308	1,436	1,503	1,499	-4	-0.3
	Trade balance	1,935	1,761	1,574	1,621	1,924	303	18.7
ET021	Navigational instruments and remote control apparatus:							
	Exports	3,102	2,921	2,866	3,082	3,217	135	4.4
	Imports	1,796	1,858	2,286	2,761	3,241	480	17.4
	Trade balance	1,306	1,063	580	321	-23	-344	([3])
ET022	Television receivers and video monitors:							
	Exports	1,237	1,257	809	874	857	-17	-1.9
	Imports	8,615	10,586	12,654	17,509	22,712	5,202	29.7
	Trade balance	-7,378	-9,329	-11,845	-16,636	-21,854	-5,219	-31.4
ET023	Radio and television broadcasting equipment:							
	Exports	2,321	1,364	1,241	1,335	1,544	209	15.7
	Imports	6,066	4,977	4,120	4,309	3,830	-479	-11.1
	Trade balance	-3,745	-3,613	-2,879	-2,974	-2,286	688	23.1

See footnote(s) at end of table.

Table ET-8--*Continued*
Electronic products : U.S. trade for industry/commodity groups and subgroups, 2001-2005[1]

USITC code[2]	Industry/commodity group	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	*Percent*
		Million dollars						
ET024	Electric sound and visual signaling apparatus:							
	Exports	949	1,042	937	1,098	1,092	-6	-0.6
	Imports	1,968	1,797	1,845	2,145	2,409	263	12.3
	Trade balance	-1,020	-755	-908	-1,047	-1,317	-270	-25.7
ET025	Electrical capacitors and resistors:							
	Exports	2,002	1,706	1,623	1,664	1,286	-377	-22.7
	Imports	2,333	2,093	1,964	2,035	2,177	143	7.0
	Trade balance	-331	-386	-341	-371	-891	-520	-140.2
ET026	Printed circuits:							
	Exports	2,089	1,853	1,742	1,836	1,781	-56	-3.0
	Imports	2,141	1,896	1,785	2,113	2,123	9	0.4
	Trade balance	-53	-44	-44	-277	-342	-65	-23.5
ET027	Circuit apparatus exceeding 1000V:							
	Exports	612	549	487	507	509	3	0.6
	Imports	357	338	272	309	401	92	29.6
	Trade balance	255	211	215	197	109	-89	-44.9
ET028	Circuit apparatus not exceeding 1000V:							
	Exports	5,098	4,478	4,431	5,138	5,327	189	3.7
	Imports	5,280	4,933	5,127	6,259	6,818	559	8.9
	Trade balance	-182	-455	-696	-1,120	-1,491	-370	-33.0
ET029	Circuit apparatus assemblies:							
	Exports	1,179	1,108	1,150	1,193	1,447	254	21.3
	Imports	2,528	2,577	2,920	3,341	3,941	599	17.9
	Trade balance	-1,350	-1,469	-1,771	-2,148	-2,493	-345	-16.1
ET030	Parts of circuit apparatus:							
	Exports	1,503	1,592	1,807	2,201	2,348	147	6.7
	Imports	1,108	1,087	1,206	1,526	1,730	203	13.3
	Trade balance	396	506	601	675	619	-56	-8.3
ET031	Cathode-ray tubes:							
	Exports	2,056	1,762	1,202	998	600	-398	-39.9
	Imports	612	607	577	673	545	-128	-19.0
	Trade balance	1,444	1,155	625	325	54	-271	-83.2
ET032	Electron tubes other than CRTs:							
	Exports	178	180	165	175	192	17	9.6
	Imports	271	247	203	195	214	18	9.4
	Trade balance	-93	-66	-38	-21	-22	-2	-7.8

See footnote(s) at end of table.

Table ET-8--*Continued*
Electronic products : U.S. trade for industry/commodity groups and subgroups, 2001-2005[1]

USITC code[2]	Industry/commodity group	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	*Percent*
		Million dollars						
ET033	Semiconductors and integrated circuits:							
	Exports	33,455	31,738	35,712	35,130	34,195	-935	-2.7
	Imports	30,016	25,651	24,190	26,256	25,425	-831	-3.2
	Trade balance	3,439	6,087	11,522	8,874	8,770	-104	-1.2
ET034	Miscellaneous electrical equipment:							
	Exports	1,805	1,564	1,426	1,968	2,419	451	22.9
	Imports	2,277	2,428	2,649	3,313	3,333	20	0.6
	Trade balance	-473	-865	-1,223	-1,345	-914	430	32.0
ET035	Computers, peripherals, and parts:							
	Exports	38,125	29,534	28,038	27,350	28,862	1,512	5.5
	Imports	74,547	75,817	76,940	89,264	93,950	4,685	5.2
	Trade balance	-36,422	-46,283	-48,902	-61,914	-65,087	-3,173	-5.1
ET036	Photographic film and paper:							
	Exports	1,953	2,127	2,233	2,182	2,091	-91	-4.2
	Imports	1,856	1,865	1,820	1,951	1,845	-106	-5.4
	Trade balance	96	262	413	231	246	15	6.5
ET037	Optical fibers, optical fiber bundles and cables:							
	Exports	1,689	474	437	383	459	76	19.7
	Imports	1,244	252	210	310	408	98	31.7
	Trade balance	446	222	227	74	51	-22	-30.3
ET038	Optical goods, including ophthalmic goods:							
	Exports	3,727	3,548	3,309	3,992	4,664	672	16.8
	Imports	4,957	4,142	4,495	5,386	5,626	239	4.4
	Trade balance	-1,230	-594	-1,186	-1,395	-962	433	31.0
ET039	Photographic cameras and equipment:							
	Exports	1,694	1,187	954	1,197	1,175	-22	-1.8
	Imports	3,560	3,029	2,715	2,382	1,880	-503	-21.1
	Trade balance	-1,866	-1,842	-1,761	-1,185	-704	481	40.6
ET040	Medical goods:							
	Exports	14,987	15,059	16,827	18,433	20,970	2,537	13.8
	Imports	10,869	13,232	16,143	19,006	20,548	1,542	8.1
	Trade balance	4,119	1,826	683	-573	422	995	([3])
ET041	Watches and clocks:							
	Exports	279	235	242	271	255	-16	-5.7
	Imports	2,957	3,098	3,291	3,634	3,795	161	4.4
	Trade balance	-2,678	-2,864	-3,049	-3,363	-3,539	-176	-5.2

See footnote(s) at end of table.

Table ET-8--*Continued*
Electronic products : U.S. trade for industry/commodity groups and subgroups, 2001-2005[1]

USITC code[2]	Industry/commodity group	2001	2002	2003	2004	2005	Change, 2005 from 2004 Absolute	*Percent*
		Million dollars						
ET042	Drawing, drafting, and calculating instruments:							
	Exports	395	368	364	397	485	88	22.2
	Imports	207	192	223	264	335	70	26.6
	Trade balance	188	176	141	133	151	18	13.5
ET043	Measuring, testing, and controlling instruments:							
	Exports	15,605	14,346	14,683	16,603	17,399	796	4.8
	Imports	11,806	11,595	12,638	14,367	15,359	992	6.9
	Trade balance	3,799	2,751	2,046	2,237	2,040	-196	-8.8

[1]Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export.
[2]This coding system is used by the U.S. International Trade Commission to identify major groupings and subgroupings of HTS import and export items for trade monitoring purposes
[3]Not meaningful for purposes of comparison.

Note.—Calculations based on unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table ET-9
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET016	Office machines:						
	Number of establishments	144	119	110	110	110	0.0
	Employees (thousands)	10.0	10.0	7.0	7.0	7.0	0.0
	Capacity utilization (percent)	51	56	43	79	79	0.0
	U.S. shipments (million dollars)	3,072	2,554	1,941	2,174	2,435	12.0
	U.S. exports (million dollars)	1,061	816	725	682	751	10.1
	U.S. imports (million dollars)	1,817	1,491	1,544	1,732	1,793	3.5
	Apparent U.S. consumption (million dollars)	3,829	3,229	2,760	3,224	3,476	7.8
	Trade balance (million dollars)	-757	-675	-819	-1,050	-1,041	0.8
	Ratio of imports to consumption (percent)	47.5	46.2	55.9	53.7	51.6	-3.9
	Ratio of exports to shipments (percent)	34.5	32.0	37.4	31.4	30.9	-1.6
ET017	Telephone and telegraph apparatus:						
	Number of establishments	960	890	830	727	625	-14.0
	Employees (thousands)	206.0	152.0	125.0	120.0	120.0	0.0
	Capacity utilization (percent)	52	35	32	56	58	3.6
	U.S. shipments (million dollars)	82,473	50,914	46,022	50,062	52,765	5.4
	U.S. exports (million dollars)	16,506	12,952	10,946	13,958	14,183	1.6
	U.S. imports (million dollars)	27,174	27,948	30,982	39,341	49,220	25.1
	Apparent U.S. consumption (million dollars)	93,141	65,910	66,059	75,444	87,803	16.4
	Trade balance (million dollars)	-10,668	-14,996	-20,037	-25,382	-35,038	-38.0
	Ratio of imports to consumption (percent)	29.2	42.4	46.9	52.1	56.1	7.7
	Ratio of exports to shipments (percent)	20.0	25.4	23.8	27.9	26.9	-3.6
ET018	Consumer electronics (except televisions):						
	Number of establishments	225	215	205	205	210	2.4
	Employees (thousands)	21.0	25.0	25.0	23.0	22.0	-4.3
	Capacity utilization (percent)	58	54	57	57	57	0.0
	U.S. shipments (million dollars)	4,200	5,270	5,520	5,200	4,900	-5.8
	U.S. exports (million dollars)	2,791	2,631	2,392	2,518	2,679	6.4
	U.S. imports (million dollars)	19,525	21,455	21,471	24,428	25,866	5.9
	Apparent U.S. consumption (million dollars)	20,934	24,095	24,599	27,111	28,087	3.6
	Trade balance (million dollars)	-16,734	-18,825	-19,079	-21,911	-23,187	-5.8
	Ratio of imports to consumption (percent)	93.3	89.0	87.3	90.1	92.1	2.2
	Ratio of exports to shipments (percent)	66.5	49.9	43.3	48.4	54.7	13.0

See footnote(s) at end of table.

Table ET-9—*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET019	Blank media:						
	Number of establishments	220	212	210	210	208	-1.0
	Employees (thousands)	13.0	11.0	9.0	9.0	9.0	0.0
	Capacity utilization (percent)	80	75	70	67	65	-3.0
	U.S. shipments (million dollars)	3,074	2,800	2,600	2,450	2,350	-4.1
	U.S. exports (million dollars)	1,017	970	1,082	1,159	1,195	3.2
	U.S. imports (million dollars)	2,423	2,746	3,127	3,831	4,248	10.9
	Apparent U.S. consumption (million dollars)	4,480	4,576	4,645	5,122	5,403	5.5
	Trade balance (million dollars)	-1,406	-1,776	-2,045	-2,672	-3,053	-14.3
	Ratio of imports to consumption (percent)	54.1	60.0	67.3	74.8	78.6	5.1
	Ratio of exports to shipments (percent)	33.1	34.6	41.6	47.3	50.9	7.6
ET020	Prerecorded media:						
	Number of establishments	690	700	708	710	710	0.0
	Employees (thousands)	29.0	28.0	27.0	28.0	28.0	0.0
	Capacity utilization (percent)	66	73	67	70	70	0.0
	U.S. shipments (million dollars)	5,728	6,200	6,700	6,750	6,750	0.0
	U.S. exports (million dollars)	3,195	3,069	3,010	3,124	3,422	9.6
	U.S. imports (million dollars)	1,259	1,308	1,436	1,503	1,499	([1])
	Apparent U.S. consumption (million dollars)	3,793	4,439	5,126	5,129	4,826	-5.9
	Trade balance (million dollars)	1,935	1,761	1,574	1,621	1,924	18.7
	Ratio of imports to consumption (percent)	33.2	29.5	28.0	29.3	31.1	6.1
	Ratio of exports to shipments (percent)	55.8	49.5	44.9	46.3	50.7	9.5
ET021	Navigational instruments and remote control apparatus:						
	Number of establishments	107	107	107	107	107	0.0
	Employees (thousands)	150.0	148.0	145.0	151.0	157.0	4.0
	Capacity utilization (percent)	59	59	67	56	58	3.6
	U.S. shipments (million dollars)	26,594	32,258	33,024	39,002	40,000	2.6
	U.S. exports (million dollars)	3,102	2,921	2,866	3,082	3,217	4.4
	U.S. imports (million dollars)	1,796	1,858	2,286	2,761	3,241	17.4
	Apparent U.S. consumption (million dollars)	25,288	31,195	32,444	38,681	40,023	3.5
	Trade balance (million dollars)	1,306	1,063	580	321	-23	([2])
	Ratio of imports to consumption (percent)	7.1	6.0	7.0	7.1	8.1	14.1
	Ratio of exports to shipments (percent)	11.7	9.1	8.7	7.9	8.0	1.3

See footnote(s) at end of table.

Table ET-9—*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET022	Television receivers and video monitors:						
	Number of establishments	10	9	8	8	7	-12.5
	Employees (thousands)	7.0	7.0	7.0	7.0	7.0	0.0
	Capacity utilization (percent)	58	54	57	57	57	0.0
	U.S. shipments (million dollars)	3,040	3,285	3,499	3,763	3,000	-20.3
	U.S. exports (million dollars)	1,237	1,257	809	874	857	-1.9
	U.S. imports (million dollars)	8,615	10,586	12,654	17,509	22,712	29.7
	Apparent U.S. consumption (million dollars)	10,418	12,614	15,344	20,399	24,854	21.8
	Trade balance (million dollars)	-7,378	-9,329	-11,845	-16,636	-21,854	-31.4
	Ratio of imports to consumption (percent)	82.7	83.9	82.5	85.8	91.4	6.5
	Ratio of exports to shipments (percent)	40.7	38.3	23.1	23.2	28.6	23.3
ET023	Radio and television broadcasting equipment:						
	Number of establishments	165	170	175	170	170	0.0
	Employees (thousands)	13.0	12.0	11.0	10.0	10.0	0.0
	Capacity utilization (percent)	65	56	52	52	52	0.0
	U.S. shipments (million dollars)	3,490	3,305	2,932	2,900	2,900	0.0
	U.S. exports (million dollars)	2,321	1,364	1,241	1,335	1,544	15.7
	U.S. imports (million dollars)	6,066	4,977	4,120	4,309	3,830	([1])
	Apparent U.S. consumption (million dollars)	7,235	6,918	5,811	5,874	5,186	-11.7
	Trade balance (million dollars)	-3,745	-3,613	-2,879	-2,974	-2,286	23.1
	Ratio of imports to consumption (percent)	83.8	71.9	70.9	73.4	73.9	0.7
	Ratio of exports to shipments (percent)	66.5	41.3	42.3	46.0	53.2	15.7
ET024	Electric sound and visual signaling apparatus:						
	Number of establishments	468	454	486	486	486	0.0
	Employees (thousands)	28.0	26.0	22.0	19.0	19.0	0.0
	Capacity utilization (percent)	66	66	63	63	63	0.0
	U.S. shipments (million dollars)	5,571	5,546	4,874	4,550	4,248	-6.6
	U.S. exports (million dollars)	949	1,042	937	1,098	1,092	-0.6
	U.S. imports (million dollars)	1,968	1,797	1,845	2,145	2,409	12.3
	Apparent U.S. consumption (million dollars)	6,591	6,301	5,782	5,597	5,565	-0.6
	Trade balance (million dollars)	-1,020	-755	-908	-1,047	-1,317	-25.7
	Ratio of imports to consumption (percent)	29.9	28.5	31.9	38.3	43.3	13.1
	Ratio of exports to shipments (percent)	17.0	18.8	19.2	24.1	25.7	6.6

See footnote(s) at end of table.

Table ET-9—*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET025	Electrical capacitors and resistors:						
	Number of establishments	267	185	174	166	158	-4.8
	Employees (thousands)	24.0	16.0	15.0	13.0	11.0	-15.4
	Capacity utilization (percent)	45	50	54	60	60	0.0
	U.S. shipments (million dollars)	2,510	1,991	1,828	1,884	1,750	-7.1
	U.S. exports (million dollars)	2,002	1,706	1,623	1,664	1,286	-22.7
	U.S. imports (million dollars)	2,333	2,093	1,964	2,035	2,177	7.0
	Apparent U.S. consumption (million dollars)	2,841	2,377	2,169	2,255	2,641	17.1
	Trade balance (million dollars)	-331	-386	-341	-371	-891	-140.2
	Ratio of imports to consumption (percent)	82.1	88.0	90.5	90.2	82.4	-8.6
	Ratio of exports to shipments (percent)	79.8	85.7	88.8	88.3	73.5	-16.8
ET026	Printed circuits:						
	Number of establishments	641	435	515	418	415	-0.7
	Employees (thousands)	72.0	51.0	60.0	58.0	55.0	-5.2
	Capacity utilization (percent)	49	51	60	65	65	0.0
	U.S. shipments (million dollars)	8,911	5,764	4,871	4,965	4,816	-3.0
	U.S. exports (million dollars)	2,089	1,853	1,742	1,836	1,781	-3.0
	U.S. imports (million dollars)	2,141	1,896	1,785	2,113	2,123	([1])
	Apparent U.S. consumption (million dollars)	8,964	5,808	4,915	5,242	5,158	-1.6
	Trade balance (million dollars)	-53	-44	-44	-277	-342	-23.5
	Ratio of imports to consumption (percent)	23.9	32.7	36.3	40.3	41.2	2.2
	Ratio of exports to shipments (percent)	23.4	32.1	35.8	37.0	37.0	0.0
ET027	Circuit apparatus exceeding 1000V:						
	Number of establishments	200	200	200	200	200	0.0
	Employees (thousands)	16.0	15.0	14.0	15.0	15.0	0.0
	Capacity utilization (percent)	60	60	60	60	60	0.0
	U.S. shipments (million dollars)	4,150	3,800	3,600	3,800	3,800	0.0
	U.S. exports (million dollars)	612	549	487	507	509	0.6
	U.S. imports (million dollars)	357	338	272	309	401	29.6
	Apparent U.S. consumption (million dollars)	3,895	3,589	3,385	3,603	3,691	2.5
	Trade balance (million dollars)	255	211	215	197	109	-44.9
	Ratio of imports to consumption (percent)	9.2	9.4	8.0	8.6	10.9	26.7
	Ratio of exports to shipments (percent)	14.7	14.4	13.5	13.3	13.4	0.8

See footnote(s) at end of table.

Table ET-9—*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET028	Circuit apparatus not exceeding 1000V:						
	Number of establishments	600	600	600	600	600	0.0
	Employees (thousands)	52.0	46.0	43.0	46.0	48.0	4.3
	Capacity utilization (percent)	60	60	60	60	60	0.0
	U.S. shipments (million dollars)	13,000	11,800	11,200	11,800	12,240	3.7
	U.S. exports (million dollars)	5,098	4,478	4,431	5,138	5,327	3.7
	U.S. imports (million dollars)	5,280	4,933	5,127	6,259	6,818	8.9
	Apparent U.S. consumption (million dollars)	13,182	12,255	11,896	12,920	13,731	6.3
	Trade balance (million dollars)	-182	-455	-696	-1,120	-1,491	-33.0
	Ratio of imports to consumption (percent)	40.1	40.2	43.1	48.4	49.7	2.7
	Ratio of exports to shipments (percent)	39.2	37.9	39.6	43.5	43.5	0.0
ET031	Cathode-ray tubes:						
	Number of establishments	15	14	13	12	7	-41.7
	Employees (thousands)	12.0	11.0	7.0	6.0	4.0	-33.3
	Capacity utilization (percent)	64	73	74	74	74	0.0
	U.S. shipments (million dollars)	2,847	2,486	1,508	1,050	750	-28.6
	U.S. exports (million dollars)	2,056	1,762	1,202	998	600	-39.9
	U.S. imports (million dollars)	612	607	577	673	545	([1])
	Apparent U.S. consumption (million dollars)	1,403	1,331	883	725	696	-4.1
	Trade balance (million dollars)	1,444	1,155	625	325	54	-83.2
	Ratio of imports to consumption (percent)	43.6	45.6	65.3	92.8	78.4	-15.5
	Ratio of exports to shipments (percent)	72.2	70.9	79.7	95.1	80.0	-15.9
ET032	Electron tubes other than CRTs:						
	Number of establishments	38	35	33	35	36	2.9
	Employees (thousands)	4.0	4.0	4.0	4.0	4.0	0.0
	Capacity utilization (percent)	64	64	60	65	70	7.7
	U.S. shipments (million dollars)	700	584	629	638	700	9.7
	U.S. exports (million dollars)	178	180	165	175	192	9.6
	U.S. imports (million dollars)	271	247	203	195	214	9.4
	Apparent U.S. consumption (million dollars)	793	650	667	659	722	9.7
	Trade balance (million dollars)	-93	-66	-38	-21	-22	-7.8
	Ratio of imports to consumption (percent)	34.2	37.9	30.4	29.7	29.6	-0.3
	Ratio of exports to shipments (percent)	25.5	30.9	26.2	27.4	27.4	0.0

See footnote(s) at end of table.

Table ET-9—*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET033	Semiconductors and integrated circuits:						
	Number of establishments	1,194	1,190	1,291	1,274	1,285	0.9
	Employees (thousands)	189.0	180.0	226.0	223.0	225.0	0.9
	Capacity utilization (percent)	57	57	86	87	89	2.3
	U.S. shipments (million dollars)	63,109	63,659	70,863	81,459	86,190	5.8
	U.S. exports (million dollars)	33,455	31,738	35,712	35,130	34,195	-2.7
	U.S. imports (million dollars)	30,016	25,651	24,190	26,256	25,425	([1])
	Apparent U.S. consumption (million dollars)	59,670	57,572	59,341	72,585	77,420	6.7
	Trade balance (million dollars)	3,439	6,087	11,522	8,874	8,770	-1.2
	Ratio of imports to consumption (percent)	50.3	44.6	40.8	36.2	32.8	-9.4
	Ratio of exports to shipments (percent)	53.0	49.9	50.4	43.1	39.7	-7.9
ET035	Computers, peripherals, and parts:						
	Number of establishments	730	715	715	720	720	0.0
	Employees (thousands)	193.0	177.0	175.0	177.0	180.0	1.7
	Capacity utilization (percent)	62	59	65	68	70	2.9
	U.S. shipments (million dollars)	89,528	82,100	84,000	84,500	85,000	0.6
	U.S. exports (million dollars)	38,125	29,534	28,038	27,350	28,862	5.5
	U.S. imports (million dollars)	74,547	75,817	76,940	89,264	93,950	5.2
	Apparent U.S. consumption (million dollars)	125,950	128,383	132,902	146,414	150,087	2.5
	Trade balance (million dollars)	-36,422	-46,283	-48,902	-61,914	-65,087	-5.1
	Ratio of imports to consumption (percent)	59.2	59.1	57.9	61.0	62.6	2.6
	Ratio of exports to shipments (percent)	42.6	36.0	33.4	32.4	34.0	4.9
ET036	Photographic film and paper:						
	Number of establishments	344	379	410	410	410	0.0
	Employees (thousands)	33.0	32.0	34.0	34.0	34.0	0.0
	Capacity utilization (percent)	65	69	72	82	82	0.0
	U.S. shipments (million dollars)	12,343	11,856	12,377	14,203	16,298	14.8
	U.S. exports (million dollars)	1,953	2,127	2,233	2,182	2,091	-4.2
	U.S. imports (million dollars)	1,856	1,865	1,820	1,951	1,845	([1])
	Apparent U.S. consumption (million dollars)	12,247	11,594	11,964	13,972	16,052	14.9
	Trade balance (million dollars)	96	262	413	231	246	6.5
	Ratio of imports to consumption (percent)	15.2	16.1	15.2	14.0	11.5	-17.9
	Ratio of exports to shipments (percent)	15.8	17.9	18.0	15.4	12.8	-16.9

See footnote(s) at end of table.

Table ET-9—*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET037	Optical fibers, optical fiber bundles and cables:						
	Number of establishments	60	45	47	47	47	0.0
	Employees (thousands)	13.0	8.0	8.0	9.0	9.0	0.0
	Capacity utilization (percent)	88	52	54	58	60	3.4
	U.S. shipments (million dollars)	5,300	3,000	2,400	2,600	2,800	7.7
	U.S. exports (million dollars)	1,689	474	437	383	459	19.7
	U.S. imports (million dollars)	1,244	252	210	310	408	31.7
	Apparent U.S. consumption (million dollars)	4,854	2,778	2,173	2,526	2,749	8.8
	Trade balance (million dollars)	446	222	227	74	51	-30.3
	Ratio of imports to consumption (percent)	25.6	9.1	9.6	12.3	14.8	20.3
	Ratio of exports to shipments (percent)	31.9	15.8	18.2	14.7	16.4	11.6
ET038	Optical goods, including ophthalmic goods:						
	Number of establishments	900	850	855	850	850	0.0
	Employees (thousands)	60.0	50.0	50.0	50.0	50.0	0.0
	Capacity utilization (percent)	68	54	52	53	59	11.3
	U.S. shipments (million dollars)	7,960	7,700	7,800	7,800	7,900	1.3
	U.S. exports (million dollars)	3,727	3,548	3,309	3,992	4,664	16.8
	U.S. imports (million dollars)	4,957	4,142	4,495	5,386	5,626	4.4
	Apparent U.S. consumption (million dollars)	9,190	8,294	8,986	9,195	8,862	-3.6
	Trade balance (million dollars)	-1,230	-594	-1,186	-1,395	-962	31.0
	Ratio of imports to consumption (percent)	53.9	49.9	50.0	58.6	63.5	8.4
	Ratio of exports to shipments (percent)	46.8	46.1	42.4	51.2	59.0	15.2
ET039	Photographic cameras and equipment:						
	Number of establishments	377	316	303	303	303	0.0
	Employees (thousands)	13.0	9.0	8.0	7.0	7.0	0.0
	Capacity utilization (percent)	54	59	70	41	41	0.0
	U.S. shipments (million dollars)	3,567	1,965	2,021	2,084	2,149	3.1
	U.S. exports (million dollars)	1,694	1,187	954	1,197	1,175	-1.8
	U.S. imports (million dollars)	3,560	3,029	2,715	2,382	1,880	([1])
	Apparent U.S. consumption (million dollars)	5,433	3,807	3,782	3,269	2,853	-12.7
	Trade balance (million dollars)	-1,866	-1,842	-1,761	-1,185	-704	40.6
	Ratio of imports to consumption (percent)	65.5	79.6	71.8	72.9	65.9	-9.6
	Ratio of exports to shipments (percent)	47.5	60.4	47.2	57.4	54.7	-4.7

See footnote(s) at end of table.

Table ET-9—*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET040	Medical goods:						
	Number of establishments	2,350	2,350	2,380	2,385	2,385	0.0
	Employees (thousands)	188.0	190.0	192.0	193.0	195.0	1.0
	Capacity utilization (percent)	65	63	68	68	70	2.9
	U.S. shipments (million dollars)	37,000	41,440	44,755	45,700	48,000	5.0
	U.S. exports (million dollars)	14,987	15,059	16,827	18,433	20,970	13.8
	U.S. imports (million dollars)	10,869	13,232	16,143	19,006	20,548	8.1
	Apparent U.S. consumption (million dollars)	32,881	39,614	44,072	46,273	47,578	2.8
	Trade balance (million dollars)	4,119	1,826	683	-573	422	([2])
	Ratio of imports to consumption (percent)	33.1	33.4	36.6	41.1	43.2	5.1
	Ratio of exports to shipments (percent)	40.5	36.3	37.6	40.3	43.7	8.4
ET041	Watches and clocks:						
	Number of establishments	145	140	140	140	140	0.0
	Employees (thousands)	6.0	6.0	6.0	5.0	5.0	0.0
	Capacity utilization (percent)	55	51	46	46	46	0.0
	U.S. shipments (million dollars)	723	677	579	630	630	0.0
	U.S. exports (million dollars)	279	235	242	271	255	-5.7
	U.S. imports (million dollars)	2,957	3,098	3,291	3,634	3,795	4.4
	Apparent U.S. consumption (million dollars)	3,401	3,541	3,628	3,993	4,169	4.4
	Trade balance (million dollars)	-2,678	-2,864	-3,049	-3,363	-3,539	-5.2
	Ratio of imports to consumption (percent)	86.9	87.5	90.7	91.0	91.0	0.0
	Ratio of exports to shipments (percent)	38.6	34.7	41.8	43.0	40.6	-5.6
ET042	Drawing, drafting, and calculating instruments:						
	Number of establishments	130	130	130	130	130	0.0
	Employees (thousands)	6.0	6.0	5.0	5.0	5.0	0.0
	Capacity utilization (percent)	69	70	64	70	70	0.0
	U.S. shipments (million dollars)	852	881	813	893	900	0.8
	U.S. exports (million dollars)	395	368	364	397	485	22.2
	U.S. imports (million dollars)	207	192	223	264	335	26.6
	Apparent U.S. consumption (million dollars)	664	705	672	760	749	-1.4
	Trade balance (million dollars)	188	176	141	133	151	13.5
	Ratio of imports to consumption (percent)	31.2	27.2	33.2	34.8	44.7	28.4
	Ratio of exports to shipments (percent)	46.4	41.7	44.8	44.5	53.9	21.1

See footnote(s) at end of table.

Table ET-9—*Continued*
Electronic products sector: Profile of U.S. industry and market, by industry/commodity groups and subgroups, 2001–2005

USITC code	Industry/commodity group	2001	2002	2003	2004	2005	Percent change, 2005 from 2004
ET043	Measuring, testing, and controlling instruments:						
	Number of establishments	4,060	4,060	4,060	4,060	4,060	0.0
	Employees (thousands)	232.0	210.0	192.0	183.0	183.0	0.0
	Capacity utilization (percent)	70	65	65	70	75	7.1
	U.S. shipments (million dollars)	42,220	38,847	38,983	42,255	43,000	1.8
	U.S. exports (million dollars)	15,605	14,346	14,683	16,603	17,399	4.8
	U.S. imports (million dollars)	11,806	11,595	12,638	14,367	15,359	6.9
	Apparent U.S. consumption (million dollars)	38,421	36,096	36,937	40,018	40,960	2.4
	Trade balance (million dollars)	3,799	2,751	2,046	2,237	2,040	-8.8
	Ratio of imports to consumption (percent)	30.7	32.1	34.2	35.9	37.5	4.5
	Ratio of exports to shipments (percent)	37.0	36.9	37.7	39.3	40.5	3.1

[1] Less than 0.05 percent.
[2] Not meaningful.

Note.—Calculations based on unrounded data.

Source: These data have been estimated by the Commission's international trade analysts on the basis of primary and secondary data sources including discussions with various Government and industry contacts. These estimated data are subject to change either from secondary sources or from detailed surveys the Commission often conducts in the course of statutory investigations or other work. Further, these data may undergo adjustments based on revisions in tariff nomenclature, classification practices, or redefinitions of industry classes.